

CLAIMS

1. An anti-flooding device with displacement of the waters for the exploitation of the water energy, comprising a double closing system with an outer or inner cylindrical element, with automatic, semi-automatic or manual operation, *characterized in* a pipeline provided, i
5 its upper part, with an opening (2) placed at the surface level of a basin which assures a constantly equal water level, and below which there are a plurality of pipes (11) which come out above the surface
10 for the air passage and for being guided to a float (1) connected to a tubular sluice-gate (3) that closes an opening (6) realized on the bottom of the pipeline, which may be connected and functioning inside as well as outside of said structure so that said sluice-gate allows the passage of water – in normal flow conditions – from the
15 opening (2) on the water surface while, in case of an excessive level increase and being connected to the float (1) on the surface, the latter rises and operates the opening of said sluice-gate (3) so that due to the pressure of the water as well as to the air inlets provided on the surface, a quick emptying of the basin may be realized until the basin
20 itself or the course of the water is back to a safety level.
2. An anti-flooding device according to claim 1, *characterized in* the presence of:
 - a float (1);

- an inlet opening (2) in normal conditions, with a filtering net (5) and a central hole for the passage of a cable (4) for raising a closing element (3);
 - a closing element (3) having the section of a truncated cone or a cylindrical section, with sealing gaskets;
 - a cable (4) connecting said float (1) and said closing element (3);
 - an extractable net (5) for filtering the flows and for protecting said device;
 - an inlet opening (6) for emergency conditions, for quick discharge;
 - a closing means (7);
 - a pipe (8) for the water outflow;
 - a plurality of valves (9) for closing the flows for servicing interventions;
 - a plurality of rings (10) for fixing and sliding of the float (1);
 - pipes (11) for air intakes and for the sliding of said float (1);
 - a lever (12) for the manual opening.
3. An anti-flooding device according to claim 1, of the pre-pressed or turned kind, suited for small structures, *characterized in* a seat having the shape of a truncated cone and sealing gaskets comprising:
- a ring (13) for the connection to the structure;
 - sealing gaskets (14);
 - a closing element (15) having a truncated cone shape.
4. An anti-flooding device according to claim 1, *characterized in* a closing means with cylindrical adjustable rings, for realizing systems

of any dimension, applying the stop rings onto the fix element as well as onto the movable element by means of a threading for regulating the closing, comprising:

- rings (16) for keeping the fix element;
- 5 - rings (17) for keeping the movable element.

5. An anti-flooding device according to claim 1, *characterized in a* closing means with conical adjustable rings.

10 6. An anti-flooding device according to claim 1, *characterized in a* closing element with an outer movable element that slides outside of the pipe-line instead than inside.

15 7. An anti-flooding device according to claim 1, *characterized in a* turbine (18) connected to the electric generator for the exploitation of the water flow, placed at the outlet of the system under application of the Venturi effect, comprising:

- valves (19) for closing the flow in case of servicing;
- a valve (20) for opening /closing the by-pass.

20 8. An anti-flooding device according to claim 1, *characterized in that* it is applied inside a basin on the banks of a river, provided with an opening communicating with the course of the water and being at the same level.

9. An anti-flooding device according to claim 1, *characterized in* the presence of a closing element with an external movable element, comprising:

- a float (1);

5 - an inlet opening (2) in normal conditions with a filtering net and a central hole for the air intake;

- an outer cylindrical closing element (3), with sealing gaskets;

- cables (4) for connecting the float and the closing element;

- an inlet opening (6) in emergency conditions, for quick outflow;

10 - a pipe (11) for the central air intake and for the sliding of the float;

- a ring (13) for connecting the structure and the ring for keeping to the fix element;

- an outer, movable closing element (15);

- rings (16) for keeping the movable element.

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10. An anti-flooding device according to claim 1, *characterized in that* it determines the exploitation of the water energy by means of the flow created inside the outflow pipes.

20 11. An anti-flooding device according to claim 1, *characterized in* the presence of a pipe provided, in its upper part, with an opening on the water surface for assuring a constant water level in the basin in normal conditions, and with an opening on the bottom for the quick discharge in case of emergency.

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12. An anti-flooding device according to claim 1, *characterized in that* the tubular sluice-gate (3) may be applied inside as well as outside of the device.

- 5 13. An anti-flooding device according to claim 1, *characterized in* the presence of two threaded rings placed on the fix part and two threaded rings on the movable part of the device, for the regulation of the closing and of the sealing of the sluice-gate (3).

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